

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the present application:

Listing of Claims:

1-10. (Cancelled).

11. (Currently Amended) A system for optimal Short Message Service (SMS) character encoding in a wireless communications device having SMS capabilities, the system comprising:

an optimizing subsystem with an input to accept an SMS message, an input to accept an evaluation control signal, and an output to supply an optimizing signal responsive to SMS message character encoding requirements prior to character encoding of the SMS message; and

an a character encoding subsystem with an input to accept the SMS message, an input to accept the optimizing signal, and an output to supply the SMS message in a character encoding format responsive to the optimizing signal.

12. (Currently Amended) The system of claim 11 wherein the evaluation control signal identifies character encoding formats available in the wireless communication device and available encoding format parameters including the number of bits needed to represent characters.

13. (Currently Amended) The system of claim 12 wherein the optimizing subsystem is configured to: evaluates the SMS message to identify the available character encoding formats usable for encoding the characters, ~~wherein the optimizing subsystem~~ determines a memory usage requirement, ~~wherein the optimizing subsystem~~ selects, as the optimal encoding format, a usable format with a minimum memory usage, and

~~wherein the optimizing subsystem supplies~~ supply the identity of the optimal encoding format in the optimizing signal.

14. (Currently Amended) The system of claim 13 wherein the character encoding subsystem is configured to encode encodes the SMS message in the optimal encoding format to generate an encoded SMS message and supplies is further configured to supply the encoded SMS message at an output.

15. (Currently Amended) The system of claim 14 further comprising: ~~wherein~~ a memory circuit ~~has~~ having an input to accept the encoded SMS message for storage and having an output to supply the stored SMS message.

16. (Currently Amended) The system of claim 15 wherein the wireless device is Mobile Origination enabled and the optimizing subsystem accepts the SMS message from a user interface; ~~and~~, the system further comprising:

~~wherein~~ a transceiver ~~has~~ having an input to accept the stored SMS message from the memory circuit for airlink transmission.

17. (Currently Amended) The system of claim 15 wherein the transceiver is configured to accept ~~accepts~~ an airlink communication including an SMS message;

~~wherein~~ ~~and~~ the optimizing subsystem is configured to accept ~~accepts~~ the SMS message from a the transceiver; ~~and~~,

~~wherein~~ the system further comprising a user interface ~~has~~ having an input to accept the stored SMS message for presentation.

18. (Original) The system of claim 15 wherein the character encoding subsystem uses seven-bit ASCII as a default optimal encoding format.

19. (Currently Amended) A method of encoding a Short Message Service (SMS) message, the method comprising:

encoding a SMS message using a SMS character encoding format to generate an encoded SMS message; and

prior to encoding the SMS message, selecting the SMS character encoding format based on a wireless device resource requirement of the encoded SMS message.

20. (Currently Amended) The method of claim 19, wherein the selecting comprises selecting the SMS character encoding format from a plurality of available encoding formats supported by a wireless communication device.

21. (Currently Amended) The method of claim 20, further comprising:

identifying the SMS character encoding format as usable for encoding the SMS message.

22. (Currently Amended) The method of claim 21 wherein identifying the SMS character encoding format as usable for encoding the SMS message comprises:

evaluating an English-language SMS message;
identifying seven-bit ASCII, ISO Latin 1, and Unicode formats as usable;
determining a number of bits needed to represent characters in the seven-bit ASCII, ISO Latin 1, and Unicode formats; and
selecting the seven-bit ASCII format as the SMS encoding format.

23. (Currently Amended) The method of claim 21, wherein the identifying the SMS character encoding format comprises determining a number of bits needed to represent characters in the available encoding format.

24. (Previously Presented) The method of claim 20, further comprising determining a memory usage requirement of the encoded SMS message.

25. (Currently Amended) The method of claim 20, wherein selecting the SMS character encoding format comprises selecting seven-bit ASCII as a default SMS character encoding format.

26. (Previously Presented) The method of claim 19, further comprising:

receiving the SMS message at a Mobile Origination enabled wireless device via a user interface; and
storing the SMS encoded message.

27. (Previously Presented) The method of claim 19, further comprising:

receiving the SMS message at a Mobile Origination enabled wireless device via a user interface; and
transmitting the encoded SMS message.

28. (Currently Amended) A Short Message Service (SMS) character encoding system configured to generate an encoded SMS message by encoding a SMS message using a SMS character encoding format and, prior to encoding the SMS message, selecting the SMS character encoding format based on a resource requirement of the encoded SMS message.

29. (Currently Amended) The SMS encoding system of claim 28, comprising:

~~an~~ a character encoding subsystem comprising an input for receiving a signal indicating the SMS character encoding format, the encoding subsystem configured to encode the SMS message in accordance with the signal; and

an optimizing subsystem configured to identify, prior to encoding of the SMS message, the SMS character encoding format from a plurality of SMS character encoding formats based on resources requirements corresponding to encoding the SMS message for each of the plurality of SMS character encoding formats, the optimizing subsystem comprising an output for generating the signal.

30. (Currently Amended) The SMS character encoding system of claim 29, wherein the resource requirement is an amount of memory required to store the encoded SMS message.